

t7_coh_sp
(TMUEHJ3b2JC2HHcBaSAyqxmwbJBHKXkXmNa)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_classes1 : \iota \Rightarrow o$ be given. Let $v1_coh_sp : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_coh_sp : \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $v1_relat_2 : \iota \Rightarrow o$ be given. Let $v3_relat_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge ((v1_classes1 X1) \wedge \\ (v1_coh_sp X1))) \Rightarrow ((X0 \in X1) \Leftrightarrow (\forall X2. \forall X3. ((X2 \in X0) \wedge \\ (X3 \in X0)) \Rightarrow (k2_tarski X2 X3 \in X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v1_classes1 X0) \wedge (v1_coh_sp \\ X0))) \Rightarrow ((v1_partfun1 (k1_coh_sp X0) (k3_tarski X0)) \wedge ((v1_relat_2 \\ (k1_coh_sp X0)) \wedge (v3_relat_2 (k1_coh_sp X0)) \wedge (m1_subset_1 (\\ k1_coh_sp X0) (k1_zfmisc_1 (k2_zfmisc_1 (k3_tarski X0) (k3_tarski \\ X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v1_classes1 X0) \wedge (v1_coh_sp \\ X0))) \Rightarrow (\forall X1. ((v1_partfun1 X1 (k3_tarski X0)) \wedge ((v1_relat_2 \\ X1) \wedge (v3_relat_2 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ (k3_tarski X0) (k3_tarski X0)))))) \Rightarrow ((X1 = k1_coh_sp X0) \Leftrightarrow (\forall X2. \\ \forall X3. (k4_tarski X2 X3 \in X1) \Leftrightarrow (\exists X4. (X4 \in X0) \wedge ((X2 \in X4) \wedge \\ (X3 \in X4)))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge ((v1_classes1 X1) \wedge \\ (v1_coh_sp X1))) \Rightarrow ((X0 \in X1) \Leftrightarrow (\forall X2. \forall X3. ((X2 \in X0) \wedge \\ (X3 \in X0)) \Rightarrow (k4_tarski X2 X3 \in k1_coh_sp X1))) \end{aligned}$$